

00862.022315



PATENT APPLICATION

8/A
P. Welke
8-13-03

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:)
Mitsuru HIURA) : Examiner: A. Dudding
Application No.: 09/915,325) : Group Art Unit: 2853
Filed: July 27, 2001) :
For: EXPOSURE APPARATUS AND DEVICE) July 30, 2003
MANUFACTURING METHOD USING THE :
SAME)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT

Sir:

In response to the Official Action dated April 30, 2003, please amend the above-identified application as follows:

RECEIVED
AUG - 4, 2003
TECHNOLOGY CENTER 2800

IN THE ABSTRACT:

Please cancel the current abstract and insert the following.

~~An exposure apparatus includes a mask on which a transfer pattern is formed and a mask scanning unit for scanning the mask, a wafer coated with a photosensitive material and a wafer stage scanning unit for scanning a wafer stage on which the wafer is mounted, a transfer unit for supplying/recovering the wafer to/from the wafer stage, and a positioning unit for positioning the wafer and the mask, sequentially exposes the transfer pattern on the wafer by illuminating part of the transfer pattern with a light beam emitted from a light source through an illumination optical system and synchronously scanning the mask and the wafer, and includes a velocity determination unit for determining a scanning velocity so as to maximize the number of wafer that can be exposed per unit time.~~

A¹ A scanning exposure apparatus includes a master stage for scanning a master, a substrate stage for scanning a substrate, a transfer device for supplying/recovering the substrate to/from the substrate stage, a positioning device for relatively positioning the substrate and the master, and a scanning velocity determination device for determining a scanning velocity so as to maximize the number of substrates that can be exposed per unit time.